

What is claimed is:

1. An electroluminescence device, comprising:
an electroluminescence element having a light emissive
layer provided between first and second electrodes;

5 a first thin film transistor receiving a selection signal
at its gate to acquire a data signal; and

Sub 1
A1
10 a second thin film transistor provided between a driving
power supply and said electroluminescence element, and
controlling power supplied from said driving power supply to said
electroluminescence element in accordance with the data signal
supplied from said first thin film transistor; wherein

said first thin film transistor has an n-channel, and at
least one of a lightly doped drain structure, an offset structure,
and a multigate structure; and

15 said second thin film transistor has a p-channel.

20 2. The electroluminescence device according to claim 1,
wherein said first and second thin film transistors include an
active layer formed of non-single crystalline semiconductor
layer.

25 3. The electroluminescence device according to claim 2,
wherein said non-single crystalline semiconductor layer is a
polycrystalline silicon layer.

4. The electroluminescence device according to claim 1,
wherein said first and second thin film transistors are of top
gate or bottom gate type, having a gate electrode above or below
their active layer.

5. The electroluminescence device according to claim 1,
wherein said electroluminescence element and said first and
second thin film transistors form a pixel of the device, and a
5 plurality of said pixels are arranged in a matrix on a substrate.

6. The electroluminescence device according to claim 5,
wherein

drains of the respective first thin film transistors for
10 pixels assigned to a same column among said plurality of pixels
arranged in the matrix are connected to the same data line, and
gates of the respective first thin film transistors for
pixels assigned to a same row among said plurality of pixels
arranged in the matrix are connected to the same scan line.

15

7. The electroluminescence device according to claim 6,
further comprising a storage capacitor connected between a source
of said first thin film transistor and a gate of said second thin
film transistor, wherein

20 a non-single crystalline semiconductor layer used for the
active layer of said first thin film transistor also serves as
one electrode of the storage capacitor.

8. The electroluminescence device according to claim 1,
25 wherein said electroluminescence element is an organic
electroluminescence element having a light emissive layer formed
of an organic compound.

9. An electroluminescence display device, comprising:

Sub 7
A2

21

an electroluminescence element having a light emissive layer provided between an anode and a cathode;

a first thin film transistor having an active layer which is formed of a non-single crystalline semiconductor film and which includes a source connected to a storage capacitor, a drain connected to a drain signal line, and a gate electrode provided over a channel of said active layer and connected to a gate signal line; and

a second thin film transistor having an active layer which is formed of a non-single crystalline semiconductor film and which includes a drain connected to a driving power supply of said electroluminescence element, and a gate electrode connected to the source of said first thin film transistor; wherein

said first thin film transistor has an n-channel and at least one of a lightly doped drain structure, an offset structure, and a multigate structure; and

said second thin film transistor has a p-channel.

10. An electroluminescence display device, comprising:
an electroluminescence element having a light emissive layer provided between an anode and a cathode;

a first thin film transistor having an active layer which is formed of a non-single crystalline semiconductor film and which includes a source connected to a storage capacitor, a drain connected to a drain signal line, and a gate electrode provided under a channel of said active layer and connected to a gate signal line; and

a second thin film transistor having an active layer which is formed of a non-single crystalline semiconductor film and which

includes a drain connected to a driving power supply of said electroluminescence element, and a gate electrode connected to the source of said first thin film transistor; wherein

5 said first thin film transistor has an n-channel and at least one of a lightly doped drain structure, an offset structure, and a multigate structure; and

said second thin film transistor has a p-channel.

11. A light emissive device, comprising:

10 a light emissive element having a light emissive layer provided between first and second electrodes;

a first thin film transistor receiving a selection signal at its gate to acquire a data signal; and

15 a second thin film transistor provided between a driving power supply and said element, and controlling power supplied from said driving power supply to said element in accordance with the data signal supplied from said first thin film transistor; wherein

20 said first thin film transistor has an n-channel, and at least one of a lightly doped drain structure, an offset structure, and a multigate structure; and

said second thin film transistor has a p-channel.